1. NUMBER:	2. PCN:			MOTO ENGINEERING			3. DATE:		4	4. PAGE:	
				MSFC ENGINEERING CHANGE REQUEST (ECR)		R)				1 OF	
5. TO:		6. THRU:					7. FROM:				
8. TITLE OF CHANGE:		I									
9. RECOMMENDED PRIORITY:				10. NEED DATE:							
☐ EMERGENCY ☐ URGENT ☐ ROUTINE											
11. PROGRAM(S)/PROJECT(S) AFFECTED:				12. CONFIGURATION ITEM(S) AFFECTED BY NOMENCLATURE:							
AS DECOMMENDED EFFECTIVENCES				14. DOCUMENTATION AFFECTED (Space ICD ata):							
13. RECOMMENDED EFFECTIVITY(IES):				14. DOCUMENTATION AFFECTED (Specs, ICD, etc.):							
15. RELATED CHANGES (ECR, ECP, CR, etc.) BY				15A. INITIATING DOCUMENT NUMBER (e.g., DR, Software Trouble Report, etc.):							
NUMBER:	The second of th										
16. JUSTIFICATION FOR CHANGE (Include effect if not incorporated. If necessary, continue on MSFC Form 2327-1, Continuation Sheet):											
17. EFFECTS ON:	- A OU IT /			, (OFF FNO) OOU			_		OLUDEM	ENTO DO	CUMENTATION
	FACILITY			(SEE ENCLOSUF							COMENTATION
SOFTWARE 18. DESCRIPTON OF CH	ENVIRONMENT		-	IMATED COST IN					HER (SP		
10. DESCRIPTION OF CIT	ANOL (IIICIUUE I	sierence to	CITCIO	suic. Il liccessa	ry, continue or	i ivioi (5 1 OIIII 23.	er-i, contin	uation	oneet.).	
19. MOD KIT INFORMATION:											
YES NO									Enclosure Paragraph		Paragraph
□ □ Previously issued modification instructions affected? (Explain)											
Proofing Proofing	of modification ins	structions a	nd kit	installation requi	red? (Explain)						
	quired? (Identify	toet invalid	atad h	v chango)							
110100110					or requalification	n)					
□ □ Requalification required? (Include descrip Vehicle/Site & CI Serial No. Change Period			0011011	Mod Kit Delivery Date				od Kit Instl.	Out-of-Service Time		
20. SIGNATURE OF ORIGINATOR: DA			DAT	TE: TELEPHONE NUMBER:						ORG. CODE:	
24				CONCUE	DENCE						
21. SIGNATURE	ORG. C	ODE		CONCUR DATE		GNATU	JRE	ORG.	CODE		DATE
22.				TECHNICAL	ΔΡΡΡΟΥΔΙ						
SIGNATURE ORG. CODE			DATE SIGNATU			JRE	RE ORG. CO			DATE	

ECR PREPARATION INSTRUCTIONS

- Block 1 **NUMBER.** The originating organization shall assign the ECR number based on the following numbering system: A 4 digit prefix consisting of the MSFC organizational mail code, followed by a dash and a 4 digit number for the sequence of ECR issued by that organization.
- Block 2 **PCN.** Enter the Program Control Number (PCN) assigned to this change. This may be a new number or the number of a package against which the ECR is written. The PCN shall be obtained from the Program/Project Configuration Management Office.
- Block 3 **DATE**. Enter date form is prepared.
- Block 4 PAGE. Enter Page 1 of 1, 1 of 2, etc., as appropriate.
- Block 5 TO. Enter the title and mailing symbol of the Program/Project/Office to which the ECR will be routed.
- Block 6 **THRU.** Enter the title and mailing symbol of the organizational focal point through which the ECR is to be routed. If not established, enter "Not Applicable."
- Block 7 **FROM**. Enter the title and mailing symbol of the organization initiating the ECR.
- Block 8 TITLE. Enter a brief and concise title which reflects the intent of the ECR.
- Block 9 **RECOMMENDED PRIORITY.** Check appropriate priority in accordance with the following definitions:

Emergency - An emergency priority shall be assigned to a proposed engineering change to correct a safety condition which could result in fatal or serious injury to personnel or extensive damage or destruction of equipment. Such conditions usually will require withdrawing the equipment from service temporarily, or suspension of the equipment operation, or discontinuance of further testing or development pending resolution of such conditions. In addition, stray electromagnetic radiation or radio frequency interference causing spurious command or control signals in equipment, require emergency action where safety conditions explained above are affected.

<u>Urgent</u> - An urgent priority shall be assigned to a proposed engineering change to correct a potentially hazardous condition, the uncorrected existence of which could result in injury to personnel or damage to equipment and reduce the mission effectiveness of the equipment. Such conditions compromise safety and embody risk within reasonable limits wherein affected equipment is continued in use, after the operator has been informed of the hazard and appropriate precautions have been defined and distributed to the user. This classification may also be used for those changes necessary to meet contractual requirements when lead time would necessitate slipping approved production, activation, or construction schedules. The urgent classification may also be used by the procuring activity for mission capability changes, when in its opinion, the nonincorporation of the changes at the earliest possible time would compromise the mission capability to a degree that would be unacceptable for contract production or mission launch schedules. Changes associated with interface problems, resulting from compatibility changes made by the other contractors, shall be classified as urgent.

Routine - A routine priority shall be assigned to a proposed engineering change when emergency or urgent is not applicable.

- Block 10 **NEED DATE.** Enter date that change prepared by this ECR needs to be incorporated.
- Block 11 **PROGRAM(S)/PROJECT(S) AFFECTED**. Enter the Unique Project Number(s) from the Agency-Wide Coding Structure and enter title(s) of program(s)/project(s) affected (e.g., ASTP, HEAO, Shuttle, etc.).
- Block 12 **CONFIGURATION ITEM(S) AFFECTED BY NOMENCLATURE.** Enter nomenclature of all configuration items affected by the change (e.g., AR&C, SXI, VRA, PCG, etc.).
- Block 13 **RECOMMENDED EFFECTIVITY(IES)**. Enter recommended effectivity; e.g., DRS, vehicle, configuration item (by serial number), launch facility, etc.

ECR PREPARATION INSTRUCTIONS (CONTINUED)

- Block 14 **DOCUMENTATION AFFECTED.** Enter number(s), including revision letter, of documentation affected by this ECR; e.g., specification(s), interface control document(s), etc.
- Block 15 **RELATED CHANGES**. Enter number(s) of any changes (ECP's, ECR's, CR's, etc.) related to this change.
- Block 15A- **INITIATING DOCUMENT NUMBER.** Enter the number of the document that initiated the need for the change, e.g., DR, Software Trouble Report, etc.
- Block 16 **JUSTIFICATION FOR CHANGE.** Describe which requirements previously established will not be met and how this change will assure that provision, or on what the net cost reduction is based and how determined. The effect of not incorporating the change shall be described.
- Block 17 **EFFECTS ON.** Self explanatory, check the appropriate blocks. As appropriate, include an enclosure providing breakdown of costs and/or schedule impact.
- Block 18 **DESCRIPTION OF CHANGE**. Enter a clear statement explaining fully the technical problem which needs correcting or improving (i.e., "It is necessary to increase the capability of this unit in order to...,"or "The _____unit will not operate as planned until the following changes are made:') Include, as applicable, a description of the change impact on areas affected by each item checked in EFFECTS ON; e.g., 'safety, reliability, ground/flight tapes, single point failures, weight, propulsion, critical components, mission operations, redlines, spares, test requirements, specification and criteria, etc. When the ECR affects safety, reliability, ordnance and/or critical components, the ECR shall include the applicable part of the FMEA and/or safety (hazards) analysis for the change.
- Block 19 **MOD KIT INFORMATION**. YES or NO Check-off Blocks Check the appropriate blocks and identify the enclosure and paragraph of each for any detailed explanation submitted with the ECR.

Vehicle/Site & CI Serial No. - List the applicable site, system, and configuration item designation(s) and/or serial number(s) affected by the change.

<u>Change Period</u> - Enter a change period designation for each proposed effectivity. These will be provided by the Project Office as soon as they are established for the specific projects.

<u>Mod Kit Delivery Date</u> - If appropriate, enter date based on the proposed task agreement coverage date and change periods.

Est. M/H for Mod Kit Inst. - Enter the estimated man-hour-per-unit required to install the change in the item.

<u>Out-Of-Service Time</u> - Enter the estimated unit out-of-service time or inoperative time that will be required to incorporate the change.

- Block 20 **ORIGINATOR**. Enter the signature, date, telephone number, and organization symbol of the ECR originator.
- Block 21 **CONCURRENCE.** Enter persons consulted or concurrences obtained. Person consulted: Indicate names of key persons consulted, within either the origination organization or other. Concurrences obtained: Obtain signature of any concurrences required by the originating organization. Any objections to proposed change should be so noted.
- Block 22 **TECHNICAL APPROVAL.** Enter signature of person(s) who must technically approve the ECR prior to transmittal to the applicable Program/Project Office for CCB processing.